

REMARKS

Claims 1-7 are now in the application.

The Examiner has objected to the specification because on page 5, line 6 the word "are" should be deleted. Please delete this word. On page 5, line 6 "the bushing 26 is mentioned. On page 5, line 10 please change "the bushing 26" to --the cylindrical housing 26--.

The Examiner has objected to claims 2-5. In claim 2, line 3 please change "said bolt openings" to --each of said bolt openings is--. In claim 3, please change "the rubber bushings surround" to --each of the rubber bushings surrounds--. In claim 4 please change "the rubber bushings are surrounded by" to --each of the rubber bushings is surrounded--. In claim 5 please change "fly wheel" to --flywheel--.

The Examiner has rejected claims 2-7 as being indefinite because in claim 2, line 2 "a housing" is recited. Claim 2, line 2 has been amended, "the torque shock absorber comprises a housing having' has been changed to --the housing has--. Claim 5 has been cancelled. The limitation of claim 5 is now incorporated into claim 1.

In paragraphs 7 and 8 the Examiner rejects claims 1-7 as being anticipated by Zeidler. Zeidler discloses an elastic shaft plate to be used for shaft couplings. One such application

of Zeidler's coupling may be positioned within in a shaft interconnecting an engine and a transmission on a vehicle. Claim 1 has been amended to include the limitation of claim 5, power is now transmitted "through a torque shock absorber having a generally cylindrical housing adapted for attachment to a [drive shaft] a flywheel turned by a crankshaft on an internal combustion engine on one cylindrical end and to a driven shaft on the other cylindrical end. The purpose of the applicant's invention as specified in the broadest claim is no longer to couple detached shafts. His invention to directly attach the flywheel in an engine and the engine's output shaft. When the torque shock absorber is integrated directly with the flywheel of an engine an unusually large diameter is available to couple to. This not only saves the expense of providing a large driven flange but it facilitates the accommodation of an unusually large driven flange, which facilitates the accommodation of a larger shock absorbing bushing, and a bushing which because of its greater size, has more capacity to absorb shock.

As shown and described Zeigler's elastic shaft plate could not without substantial modification be coupled directly to a heated flywheel of an internal combustion engine. And more importantly, it was neither intended, nor contemplated to be so coupled to the flywheel.

In paragraph 9 the Examiner rejects claims 1,2 and 5-7 as being anticipated by Kaye. Kaye utilizes a plate rather than a housing as is disclosed by the applicant. An advantage of using a plate rather than a housing is that a plate can better flex to accommodate misalignments between the driven shaft and the rotating flywheel. This flexing however

creates a disadvantage however when transmitting substantial torque. Because it is practical to accurately align and maintain this accurate alignment between the transmission and the flywheel there is little advantage gained by being able to accommodate any misalignment between the two. However, there is considerable disadvantage. Consistent torque transmission is likely and probable to result in lateral twisting of the bolts within the plate. The use of rubber bushings, subjected to engine operating temperatures over sustained and long periods is likely to result in permanent lateral twisting of the bolts within the rubber bushings and permanent deformation of the rubber bushings. The rubber bushings are only mounted within a port on the plate. The problem with this arrangement is that the plate is primarily adapted to dampen engine vibration rather than to absorb variations in rotational torque as would be better accomplished by a housing surrounding, and maintaining the bushing and bolt therein in parallel axial alignment with the axis of the rotating shaft. As shown by the figures 4 and 5 of Kaye, plate 14 and port 20 would be unable to ensure that bolt 32 maintained in a parallel position to the rotating shaft over a sustained time.

In paragraph 10 the Examiner has rejected claims 3 and 4 as unpatentable over Kaye. He states that it would be obvious for someone skilled to make sleeves from steel. The sleeves shown in Kaye, even if fabricated from steel would not prevent lateral twisting of the bolt over a sustained time period. The disclosed design totally depends on the sleeves, and not the housing to prevent such twisting.

It is respectfully submitted that the claims as amended should now be allowable

together with dependent claims thereon, 2-7.

As this response is submitted one month late a fee in the amount of \$60. is enclosed.



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